

**REMARKS**

Claims 1 - 36, 41 and 54 - 55 have either been previously cancelled or are herein cancelled, without prejudice or disclaimer. Claims 37 - 40 and 42 - 53 and 56 - 58 are presently pending in the application.

Claim 39 was noted as allowable in the Office Action of February 26, 2003, for which the Applicant thanks the Examiner.

The claims listed herein as Not Entered from the 1.116 Amendment filed May 26, 2003, are herein requested to be entered, as modified by those claims herein qualified by the status identifier Currently Amended.

The Examiner issued an Advisory Action dated June 6, 2003, in which it is stated that the 1.116 Amendment of May 23, 2003, will require further consideration and/or search. In a subsequent telephonic interview between the Examiner and Applicant's representative on June 11, 2003, the Examiner stated that the 1.116 Amendment of May 23, 2003 overcomes the rejections to claims 37 and 38, but that claims 40 and 54 raise new issues for consideration.

Applicant thanks the Examiner for the noted allowable subject matter of claims 37, 38, and 39 (in addition to the allowable subject matter of claim 47 if such claim were to be rewritten to include the limitations of the base claim and any intervening claims), and provides this further Submission under 37 C.F.R. § 1.114(c) by which Applicant asserts patentable and distinct differences between the instant invention and the prior art cited in the Office Action of February 26, 2003, as explained herein.

**I. 35 U.S.C. § 112, 2<sup>nd</sup> Paragraph Rejections**

Claims 37 - 40 and 42 - 58 stood previously rejected under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph. These rejections have been overcome as noted by the Examiner in the Advisory Action of June 6, 2003.

**II. Claim Rejection -- 35 U.S.C. § 102**

Claims 37, 38, 42 - 46, 49 - 51, 54, 55 and 57 stand rejected as allegedly being unpatentable in view of U.S.P. No. 4,998,422 ("Borgmann"). For the following reasons, this rejection is respectfully traversed.

Claims 54 and 55 are herein cancelled, obviating the rejection as to those claims.

Independent claims 37 and 38 have been acknowledged by the Examiner as overcoming the prior art as noted in the Interview Summary of June 11, 2003.

Independent claim 42 recites (among other things) "a cam including a first cam portion to control the balls and a cam drive portion that includes opposed drive recesses," as well as "the cam [being] operable by the barrel through an interspaced coupler that projects into holes . . . ." *See* Fig. 6, elements 48 and 49 (opposed drive recesses); and Fig. 20, element 54 (plurality of holes).

At least the above-noted features are altogether absent in the Borgmann reference. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this anticipation rejection.

Dependent claims 43 - 46, 49 - 51, and 57 depend directly or indirectly from claim 42 and are thus asserted as being patentable by virtue of such dependency (as well as in addition to their individual recitations).

Additionally as to claim 44, this claim recites (among other things) “said stop member protruding into the offset recess . . .” At least these additional features are altogether absent in the Borgmann reference and the Examiner is therefore respectfully requested to reconsider and withdraw this anticipation rejection for at least this additional reason.

Additionally as to claim 47, this claim recites (among other things) “the drive pins being configured to protrude more from one side of the support disc than the other . . .” At least these features are altogether absent in the Borgmann reference and the Examiner is respectfully requested to reconsider and withdraw this anticipation rejection at least for this additional reason.

Additionally as to claim 48, this claim recites (among other things) “wherein the cam has a removable configuration enabling the removal of the shackle . . .” At least these features are altogether absent in the Borgmann reference and the Examiner is therefore respectfully requested to reconsider and withdraw this anticipation rejection at least for this additional reason.

### **III. Claim Rejection -- 35 U.S.C. § 103**

Claims 40, 48, 52, 56 and 58 stand rejected as allegedly unpatentable under 35 U.S.C. § 103(a) in view of U.S.P. No.s 4,998,422 (“Borgmann”) and 5,377,511 (“Meckbach”) (cumulatively, “the prior art”). For the following reasons, this rejection is respectfully traversed.

**Independent Claim 40**

Independent claim 40 recites (among other things) that the cam includes opposing pairs of shoulders, said opposing pairs of shoulders separated by a bridge that spans a distance of the cam, said distance being the substantial diameter of a bottom portion of the cam which is orthogonal to an axis of rotation of the cam and is nearest to the second end surface of the casing. At least these features are altogether absent in the prior art relied upon in the grounds of rejection. That is, Borgmann is deficient in not teaching or suggesting the previous and Meckbach fails to cure the deficiencies of Borgmann. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**Independent Claim 42**

Independent claim 42 (upon which claims 48, 52, 56 and 58 depend) recites (among other things) “the cam operable by the barrel through an interspaced coupler that projects into holes within the cam drive recesses. . .” *See* Figure 20, element 54 (plurality of holes). At least these features are altogether absent in the prior art relied upon in the grounds of rejection. That is, Borgmann is deficient in not teaching or suggesting the above-noted features of independent claim 42 and Meckbach maintains this deficiency. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**No Reasonable Expectation of Success in the Proposed Combination**

Moreover, there fails to be a reasonable expectation of success in any attempt to combine Borgmann with Meckbach. That is, each of the individual references specifies precise location of, and operation for, dozens and dozens of parts. Accordingly, the precise workings of each

would fail to function if the two were combined. Therefore, the proposed modification is inappropriate. *See* M.P.E.P. § 2143.02.

**The Proposed Modification Changes the Principle of Operation of a Reference**

Any combination of Borgmann with Meckbach invariably results in the change of principle of operation of one or the other, thus failing to conform with M.P.E.P. § 2143.02.

In light of the previous, independent claims 40 and 42 are averred to be patentable. Additionally, dependent claims 48, 52, 56 and 58 are averred to be patentable at least by virtue of their ultimate dependency upon claim 42 (in addition to their individual recitations).

Further as to claim 58, this claim recites (among other things) “wherein a cross-section of the channel is defined by a radius substantially the same as the radii of the balls,” a feature that neither Borgmann nor Meckbach teach or suggest. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection at least for this additional reason.

**IV. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Jason C. Beckstead  
Registration No. 48,232

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE



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